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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/825,797

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Hiroyuki Shibaki

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EXAMINER

MOTSINGER, SEAN T

ART UNIT

PAPER NUMBER

2624

MAIL DATE

DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/825,797	Applicant(s) SHIBAKI ET AL.	
	Examiner SEAN MOTSINGER	Art Unit 2624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 December 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 and 9-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6, 9-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Response to Applicants Arguments

1. Applicants Arguments filed on 9/17/2007 have been entered and made of record.
2. Regarding Applicants arguments with respect to the rejections under 35 U.S.C. 101; applicant has amended the claims to overcome this rejection and it is no longer applicable.
3. Regarding applicants arguments with respect to the rejections Under 35 U.S.C. 102 in view of Coleman. Applicants arguments are not persuasive.
4. Applicant argues that” Coleman does not disclose that the print-quality characteristics are associated or linked to the image object using an additional object that represents the attributes.” The examiner disagrees, Applicant admits that “at least one printer-independent quality characteristic is associated with the at least one image object and that object is inserted into the file”. Applicant’s disagreement appears to be that applicant does not consider the print quality characteristic to be an object. The examiner disagrees; as applicant admits “the association information is inserted into the PDL file” examiner believes this additional information can be considered an object.

5. Applicant further argues that the object is not invisible however this appears to be based on the fact that applicant does not consider the additional information of Coleman to be an object. It is likewise unpersuasive.
6. Applicant further argues that the additional object in Coleman is not of a size equal to that of the object having a predetermined attribute. Examiner did not make a rejection for this element with regard to Colman in the prior action because it was not necessary because a rejection was made with regard to Nicholson. However now that this feature is included in the independent claim the examiner asserts this feature is included in the claim. The print quality characteristic contains information which applies to the object as a whole therefore it clearly represents the same size as the object.
7. Regarding applicants arguments with respect to the rejection Under 35 U.S.C. 102 in view of Nicholson US 2002/0067859; applicants arguments are not found persuasive.
8. Applicant first argues "nothing in Nicholson discloses that the objects are described in a predetermined format and then converted into a file of a predetermined file format." However applicant readily admits that, in Nicholson, the objects data is made to conform to a pre-existing standard data format. It is unclear to the examiner why applicant does not feel this meets the claims clearly the

reference describes objects (via coded "invisible text" object (applicant's additional object) paragraph 100) and converts both an additional object (containing the object description as described in applicant's specification paragraph 30) and the objects (non-coded bitmap paragraph 100) into a PDF format (see paragraph 100).

9. Applicant next argues that Nicholson fails to disclose "linking an additional object representing attribute information on the predetermined image attribute with the object having the predetermined image attribute." The examiner believes that there may be a misunderstanding with regard to the examiner's interpretation. The Examiner did not intend to indicate that the "unrecognizable word label" is an "predetermined image attribute" as applicant appears to believe; but the "unrecognizable image attribute" is an "object having a predetermined image attribute." This object is stored as "non-coded bitmap" object and an additional "invisible text object" (i.e. additional object). The image attribute is the fact that the object is "unrecognizable." All of these features are described in paragraph 100. The additional object "invisible text" describes the text as best understood (but having insufficient confidence to be considered recognizable) for the unrecognizable object. Clearly both the text object and the non-coded bitmap object are linked because they are in the same location (i.e. one covers the other paragraph 100).

10. Applicant next argues that the additional object (invisible text as described by Nicholas) is not invisible. The examiner is not sure what applicant is contending here, to the examiner that if "invisible text" appears "invisible" it is invisible.
11. Applicant next argues that "Nicholson does not disclose that the additional invisible object has a size that is equal to that of the object having the predetermined image attribute"; because "paragraph 100 only discloses that the non-coded bitmap is to be displayed over the unrecognized words." The examiner disagrees with applicants interpretation Nicholson saves the object as two objects using a main "non coded bitmap" object which is to be displayed and the additional "invisible text" which contains information not about the display but about the meaning of the text. Both of these objects are coexisting representations of the object located in the object dividing step and are clearly intended to have the same size as the object because they both in a sense are the object itself, one merely covers the other such that it is visible. Furthermore Looking at figure 12a element 318 (note element 318 shows the "invisible text" object linked to the un-encoded bitmap object (the word document) clearly the "invisible text" is the same size as the bitmap object corresponding to the word document.

Rejections Under 35 U.S.C. 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

Art Unit: 2624

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

12. Claims 1-3, 5, 7, 10-12 are rejected under 35 U.S.C. 102(e) as being anticipated by Coleman US 2003/0121007.

13. Re claim 1 Coleman discloses An image processing apparatus comprising: an image attribute determining unit to determine an image attribute of an image data (see abstract object type); an object dividing unit to divide the image data into a plurality of objects (see abstract note the image is split into a plurality of objects) based on the image attribute (object type); and an object describing unit to describe the objects in predetermined formats (see paragraph 15 note the object must be described in some format) and convert the objects into a file of a predetermined file format (PDL file see paragraph 15), wherein the object describing unit describes an object having a predetermined image attribute among the objects by associating an additional object (object descriptor paragraph 15) representing information on the predetermined image attribute (printer independent quality characteristic paragraph 15) with the object having the predetermined image attribute, wherein the additional object is an invisible object, (the object is not intended to be printed and therefore is invisible see paragraph 15) and where a size of the additional object equals that of

the object having the predetermined attribute (paragraph 15 The print quality characteristic contains information which applies to the object as a whole therefore it is clearly represents the same size as the object.).

14. Re claim 2 Colemans further describes further comprising a data converting unit (printer control device paragraph paragraph 16) to convert the file of the predetermined file format into a print instruction for a printer (printer dependent imaging actions paragraph 16) and output the print instruction to the printer, wherein the data converting unit identifies the object having the predetermined image attribute based on the additional object (printer independent quality characteristics paragrapg 16), and performs an image processing to the object based on the predetermined image attribute (color transforms halftoning... paragraph 25).

15. Re claim 3 Coleman further discloses wherein when the object is identified as an object having a text attribute (paragraph 33), the data converting unit performs a halftone processing with a higher sharpness to the object (sharp edges, and choice of halftone paragraph 33), compared with an object having another attribute than the text attribute.

16. Re claim 5 Coleman further discloses when the object is identified an object having a text (text paragraph 33) attribute with a white background, the data converting unit performs a halftone processing with a higher sharpness to the object

(sharp edges paragraph 33), compared with an object having other attribute than the text attribute with the white background.

17. Re claim 6 Coleman further discloses wherein when the object is identified as an object having a text attribute with a color background, the data converting unit performs an identical halftone processing as that for the color background to the object (note set of printer independent characteristics can be chosen including all objects treated the same this would result in both color text and background being the same see paragraph 24).

18. Re claim 10 claim 10 is the apparatus of claim 1 (see rejection for claim 1 further including a printer to print the document. Coleman also discloses a printer (see paragraph 16)

19. Re claim 11, claim 11 is a computer program causing a computer to perform the method corresponding to the apparatus of claim 1(see rejection for claim 1.) Coleman also uses a computer program (see paragraph 34).

20. Re claim 12 Claim 12 is a computer program causing a computer to perform the method corresponding to the apparatus of claim 2(see rejection for claim 2.) further comprising outputting to a printer. Coleman also uses a computer program (see paragraph 34) and outputs to a printer see paragraph 16.

21. Claim 1,2 7-9 rejected under 35 U.S.C. 102(b) as being anticipated by Nicholson et al US 2002/0067859.
22. Re claim 1 Nicholson discloses An image processing apparatus comprising: an image attribute determining unit to determine an image attribute of an image data (detect identifiable objects see abstract); an object dividing unit to divide the image data into a plurality of objects based on the image attribute (detect identifiable objects see abstract; and an object describing unit to describe the objects in predetermined formats (note the objects must be in some format) and convert the objects into a file of a predetermined file format (PDF paragraph 100), wherein the object describing unit describes an object having a predetermined image attribute (unrecognizable word label) paragraph 100) among the objects by associating an additional object (invisible text paragraph 100) representing information on the predetermined image attribute with the object (text paragraph 100) with the object having the predetermined image attribute, wherein the additional object is an invisible object (paragraph 100)., and where a size of the additional object equals that of the object having the predetermined attribute (paragraph 100 note the invisible object is meant to cover the same area as the bitmap object.). Also see figure 12a element 318 (note element 318 shows the "invisible text" object linked to the un-encoded bitmap object (the word document) clearly the "invisible text" is the same size as the bitmap object corresponding to the word document.

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23. Re claim 9 Nicholson discloses wherein the predetermined file format is a portable document format (paragraph 100.)
24. Re claim 10 claim 10 is the apparatus of claim 1 (see rejection for claim 1 further including a printer to print the document. Nicholson also discloses a printer (see paragraph 96)
25. Re claim 11, claim 11 is a computer program causing a computer to perform the method corresponding to the apparatus of claim 1(see rejection for claim 1.)
Nicholson also uses a computer program (see paragraph 99)

Rejections Under 35 U.S.C. 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

26. Claim 4 rejected under 35 U.S.C. 103(a) as being unpatentable over Colman in view of Amedei US 6,176,566.
27. Re claim 4 Coleman discloses all of the elements in claim 2 Coleman does not disclose wherein when the object is identified as an object having a text attribute with an achromatic color, the data converting unit performs an image processing to

enhance a black color in color correction and black color generation or an image processing to eliminate any remaining color of the object. Amedei discloses wherein when the object is identified as an object having a text attribute with an achromatic color (black and white text column 2 lines 10-20), the data converting unit performs an image processing to enhance a black color in color correction and black color generation or an image processing to eliminate any remaining color of the object (Removes color data column 2 lines 10-20) The motivation to combine is that the color is "undescribable" column 1 lines 44-50.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SEAN MOTSINGER whose telephone number is (571)270-1237. The examiner can normally be reached on 9-5 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bhavesh Mehta can be reached on (571)272-7453. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Motsinger
4/10/2008

/Bhavesh M Mehta/

Supervisory Patent Examiner, Art Unit 2624